β-strand pair	NMSM $\Delta\tau$ [deg]
$\beta_1\beta_2$	4.0
$\beta_2\beta_3$	2.9
$\beta_3\beta_4$	1.8
$\beta_4\beta_5$	2.3
$\beta_5\beta_6$	1.8
$\beta_6\beta_7$	1.1

TABLE S7: $\Delta\tau$ values between pairs of neighboring strands at the end of the NMSM path ($\Delta\tau_{ij} = \tau_{ij}(\text{rigor}) - \tau_{ij}(\text{NMSM})$).